

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 14-102

PROJECT INFORMATION

Project Title: Bigler (#199) and Rattlesnake (#207) Water Catchments

Region and Game Management Unit: Region I / GMU 4B

Local Habitat Partnership Committee (LHPC):

- Winslow

Was the project presented to the LHPC?

YES[x] NO

Has this project been submitted in previous years? YES[] NO[x]

If Yes, was it funded? YES[] NO[] → **Funded HPC Project #(s):**

Project Type: Water Development Renovation

Brief Project Summary: Redevelop Bigler and Rattlesnake catchments from a current capacity of approximately 2,000 gallons each to 10,000 gallons each.

Big Game Wildlife Species to Benefit: Elk, Deer, Javelina, Pronghorn

Implementation Schedule (Month/Day/Year):

Project Start Date: Spring 2015

Project End Date: Spring 2015

Environmental Compliance:

NEPA Completed: Yes[x] No[] N/A[]

Projected Completion Date: September 2014

State Historic Preservation Office - Archaeological Clearance:

Yes[x] No[] N/A[]

Projected Completion Date: April 2014

Arizona Game and Fish Department EA Checklist: N/A[]

To be Completed by: E. Lautzenheiser

Projected Completion Date: _____

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 60,156.26

Cost Share or Matching Funds: \$ 57,040.00

Total Project Costs: \$ 117,196.26

PARTICIPANT INFORMATION

Applicant (please print):

Evan Lautzenheiser

Address: 2878 E. White Mountain

Blvd. Pinetop, AZ 85935

E-mail:

elautzenheiser@azgfd.gov

Telephone: 928-358-8319

Date: 8/28/14

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with:
USFS Black Mesa, SSDV

NEED STATEMENT – PROBLEM ANALYSIS:

Permanent water for big game has been identified as a limiting factor in GMU 4B. At lower elevations (Pinion –Juniper habitat) in GMU 4B there are no or few dependable sources of perennial water. Wildlife relies on man-made water sources such as guzzlers or livestock water sources. Some of these livestock waters are available to wildlife all year long, but are limited in number. Without guzzlers that have sufficient storage capacity to meet wildlife demands, there would be no perennial water sources in these habitat types throughout the southern portion of the unit.

The primary purpose of this proposal is to increase perennial water availability in areas of Unit 4B that are lacking perennial water. With a goal of perennial water coverage across all parts of Unit 4B, all species both game and non-game will benefit. This will enable big game to better distribute themselves across larger areas and utilize some habitats throughout the year. Using a two-mile radius to evaluate perennial water distribution, these catchments will affect approximately 4,000 acres that currently have no perennial water coverage.

Arizona Game and Fish personnel and volunteers haul an average of 37,500 gallons/year of water to 15 operational guzzlers and 3 natural potholes in the southern portion of 4B. Without this water hauling, there would be only four perennial water sources over approximately 107,000 acres of habitat. In addition to the 15 operational guzzlers, there are six that are non-operational. The district goal for GMU 4B is to have all 24 guzzlers and potholes operational with sufficient storage capacity to meet wildlife demands. *See attached GMU 4B water distribution map.*

The Bigler catchment (#199) is a USFS guzzler identified by the Arizona Game and Fish Department, Region I, as a critical water within Game Management Unit 4B. Built in the 1950's, the guzzler is working, but is prone to going dry due to its small storage capacity (only approx. 2,000 gallons) and the high numbers of elk and deer that regularly use the guzzler. Arizona Game and Fish personnel haul approximately 5,000 gallons a year to this catchment to prevent it from going dry. The closest perennial water is approximately 1.42 miles away and is another USFS catchment (Javelina) that Arizona Game and Fish personnel haul approximately 3,000 gallons/year to maintain. Two miles to the west is Wildcat Pothole (#1002), a natural pothole that Arizona Game and Fish personnel maintain with approximately 5,000 gallons of water per year.

The Bigler catchment is located in the southern portion of GMU 4B, west of Forest road 153, south of Forest Road 153A and east of Wildcat Canyon, located on the Apache-Sitgreaves National Forest. It is located in Pinion – Juniper mixed woodland and adjacent to the Wildcat and Durfee burns. This area supports good numbers of elk, mule deer, pronghorn and some javelina. There is limited seasonal water available in the area so without permanent water, most wildlife in this area would be transient and seasonally restricted.

Rattlesnake catchment (#207) is a USFS guzzler identified by the Arizona Game and Fish Department, Region I, as a critical water within Game Management Unit 4B. Built in the 1950's, the guzzler is working, but is prone to going dry due to its small storage capacity (only approx 2,000 gallons) and the high numbers of elk and deer that regularly use the guzzler. Arizona Game and Fish personnel haul approximately 3,000 gallons a year to this catchment to prevent it from going dry. The closest perennial water is approximately 3.6 miles away, located in GMU 3C and is also a USFS

catchment. The closest perennial water source in GMU 4B is approximately 3.3 miles away and is a USFS catchment that Arizona Game and Fish personnel haul approximately 1,000 gallons of water per year.

Rattlesnake catchment is located in the southern portion of GMU 4B, north of State Route 277 and west of State Route 377, located on the Apache-Sitgreaves National Forest. This catchment is located in the Pinion - Juniper mixed woodland. The area supports elk, mule deer, and pronghorn. There is limited seasonal water available in the area so without permanent water, most wildlife in this area would be transient.

PROJECT OBJECTIVES:

The project objective is to redevelop two (2) water catchments that will provide big game with perennial water. This is part of the 4B District goal, which is to provide perennial water for big game across the entire unit.

PROJECT DESCRIPTION AND STRATEGIES:

- Bigler and Rattlesnake catchments: Replace the existing wooden framed metal apron and steel vault tank (2,000 gal) with four 2,500 gallon polyethylene storage tanks (10,000 gal), 24'x92' fenced R-panel apron, 4'x5'x8' polyethylene walk-in "elk" drinker and a pipe-rail perimeter fence (150' x 150'). See attached CADD drawings.
- Provide a relatively maintenance free perennial water source to wildlife in an area that lacks perennial water.

PROJECT LOCATION:

- 1.) Bigler (#199): T14N, R151/2E, section 25. See attached map. Land ownership for this project is Forest Service.
- 2.) Rattlesnake (#207): T13N, R18E, section 31. See attached map. Land ownership for this project is Forest Service.

LAND OWNERSHIP AT THE PROJECT SITE(S):

(if the project area is private property, please state specifically and provide the landowner's name)

- USDA Forest Service, Apache-Sitgreaves National Forest, Black Mesa Ranger District

*IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or
LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?*
YES[] NO[] N/A[x]

HABITAT DESCRIPTION:

Madrean Montane Conifer Forest with the principal woodland species consisting of ponderosa pine and pinion juniper woodland. Browse species such as cliff rose are present in the area. Elevations in the project area range from 6,300 to 6,600 feet. Forage conditions are good in this habitat type.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

Materials Needed For Catchments:

Quantity	Item	Price	
8	8'w X 13'L X 51"deep 2,500 gallon Polyethylene Water Storage Tank	\$26,560.88	(\$3,320.11 per tank)
2	5'w X 8'L X 4'deep Polyethylene Walk-in Trough and 24' Polyethylene Gutter	\$ 9,394.28	(\$4,697.14 per trough/gutter pair)
2	24 X 96' Metal Frame and R-panel Apron	\$14,589.94	(\$ 7,294.97 per apron)
2	3" Schedule 80 PVC Plumbing	\$ 2,000.00	(1,000.00 per catchment)
2	150' X 150' Heavy Duty Piperail Fence (This includes concrete for the whole project)	\$ 6,111.16	(\$3,055.58 per catchment)
2	Misc. Materials	\$1500.00	
			(\$750.00 per catchment)

Catchment Costs:

Total = \$60,156.26

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

Arizona Game & Fish:

PR bubble money + SSDV labor or contractor costs + Archeological clearances = \$54,540.00

USDA Forest Service:

Environmental compliance work = \$2,500 (**COMPLETE**)

Total Cost Share = \$57,040.00

Total Cost = \$117,196.26

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- Arizona Game and Fish will coordinate and construct or contract the construction of this project
- USDA Forest Service/ Environmental Compliance

WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?

YES☒ NO☐ N/A☐

PROJECT MONITORING PLAN:

Arizona Game and Fish conducts wildlife surveys for elk and deer in the project area. The Department will continue to do these surveys and analyze the data with respects to this project. Some anticipated outcomes from the project are better wildlife distribution leading to improved range conditions.

PROJECT MAINTENANCE:

AGFD will monitor and complete all maintenance needs at these wildlife waters.

PROJECT COMPLETION REPORT TO BE FILED BY:

Evan Lautzenheiser / AGFD

WATER DEVELOPMENT PROJECTS *(please use the worksheet below):*

TREE CLEARING/REMOVAL PROJECTS *(please use the worksheet below):*

ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Bigler #199 and Rattlesnake #207 water catchments

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**
Yes
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie, January 2014
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
___2-4 ___4-6 ___6-8 ___8-10 ___10-12 ___12-14 **X** 14-16 ___>16
- 4) **Is there a perennial water source available to big game within four miles of this project?**

___X___ YES (please complete #5 below) ___NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Bigler #199
Name of water source: Javelina
Type of water source (catchment, spring, dirt tank, etc.): catchment
Ownership of water source: Forest Service
Distance in miles from project: 1.42 miles

Rattlesnake #207
Name of water source: Phoenix Wash catchment
Type of water source (catchment, spring, dirt tank, etc.): catchment
Ownership of water source: USFS
Distance in miles from project: 3.6 miles
- 6) **Is the target wildlife species a result of transplant efforts?** ___YES ___X___ NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**
N/A
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): ___2x4 vehicles **X** 4x4 only ___foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ___YES **X** NO

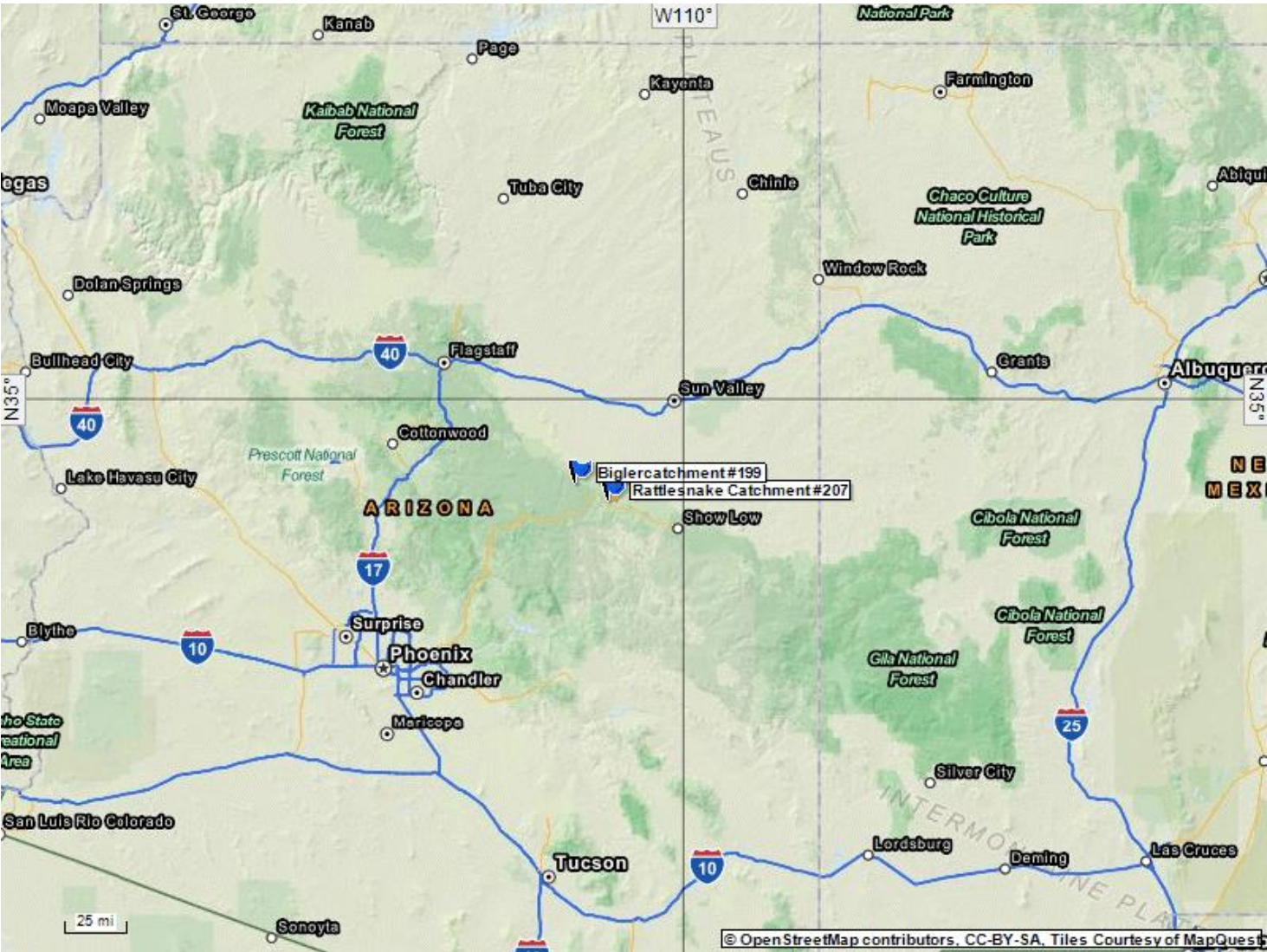
-- Please describe any restrictions to public access: NA
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**

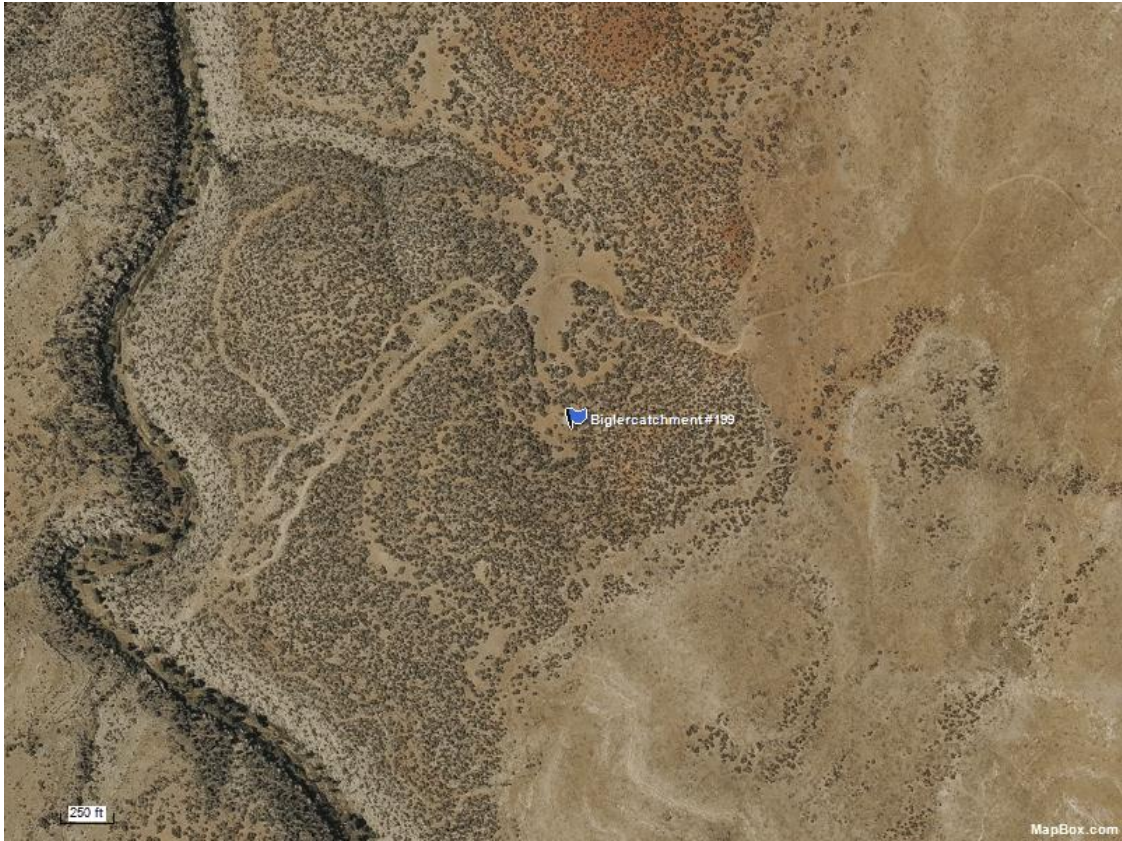
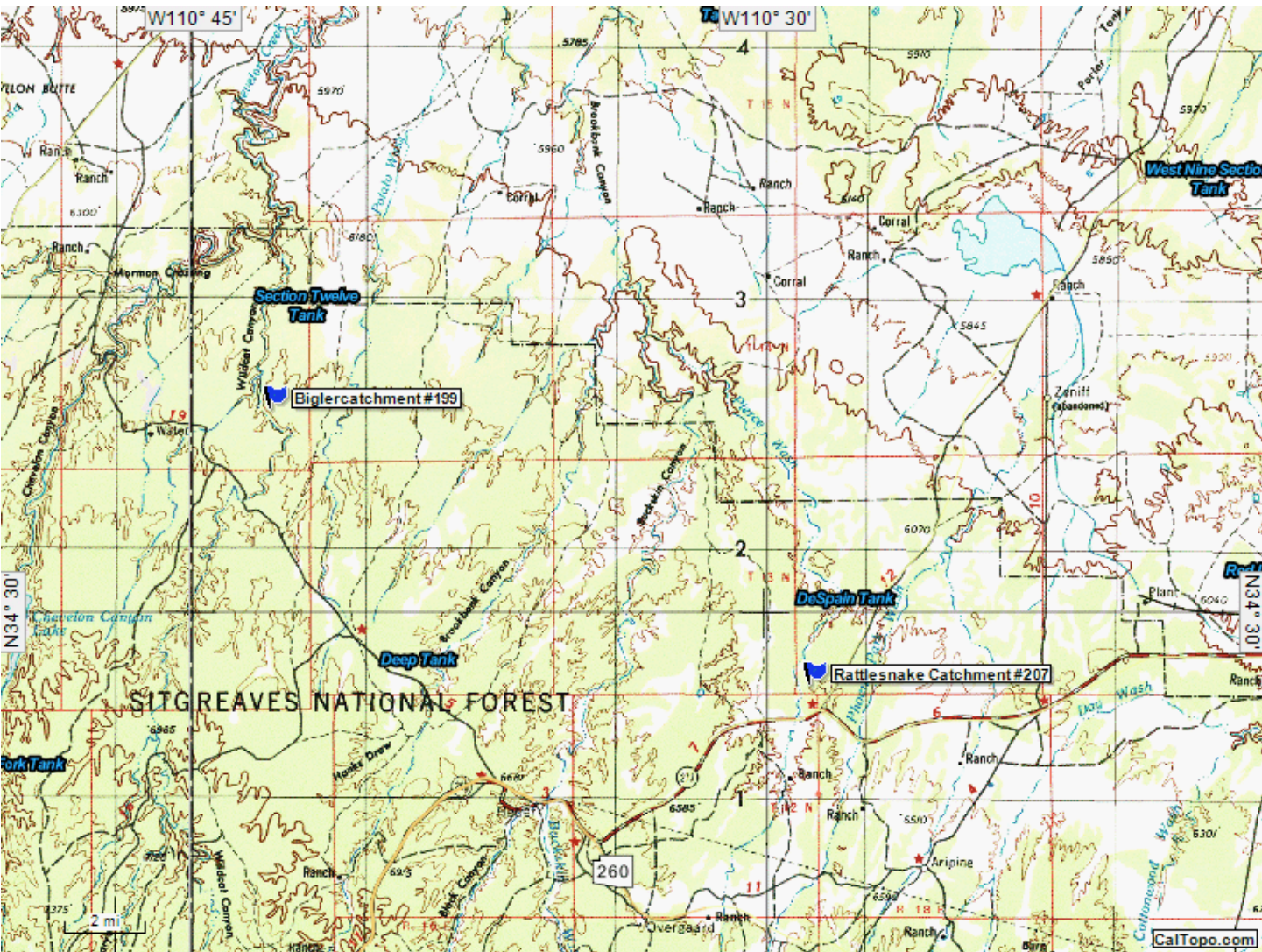
10) Was a site visit completed? ___ Yes ___X___No

If Yes, please list personnel that attended and date.

Evan Lautzenheiser AZFGD and Joe Currie AZGFD will complete site visit in September 2014.

Joe Currie has completed Aerial inspection via Google earth.



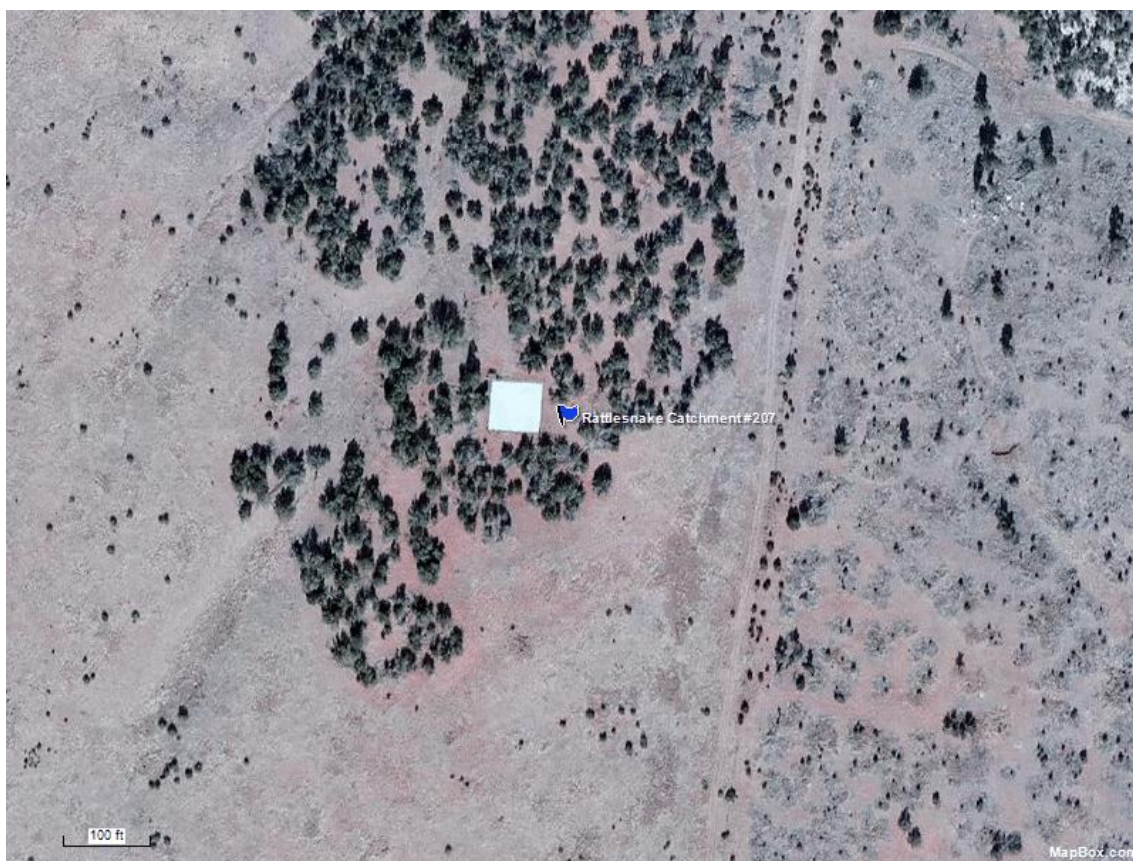


Big

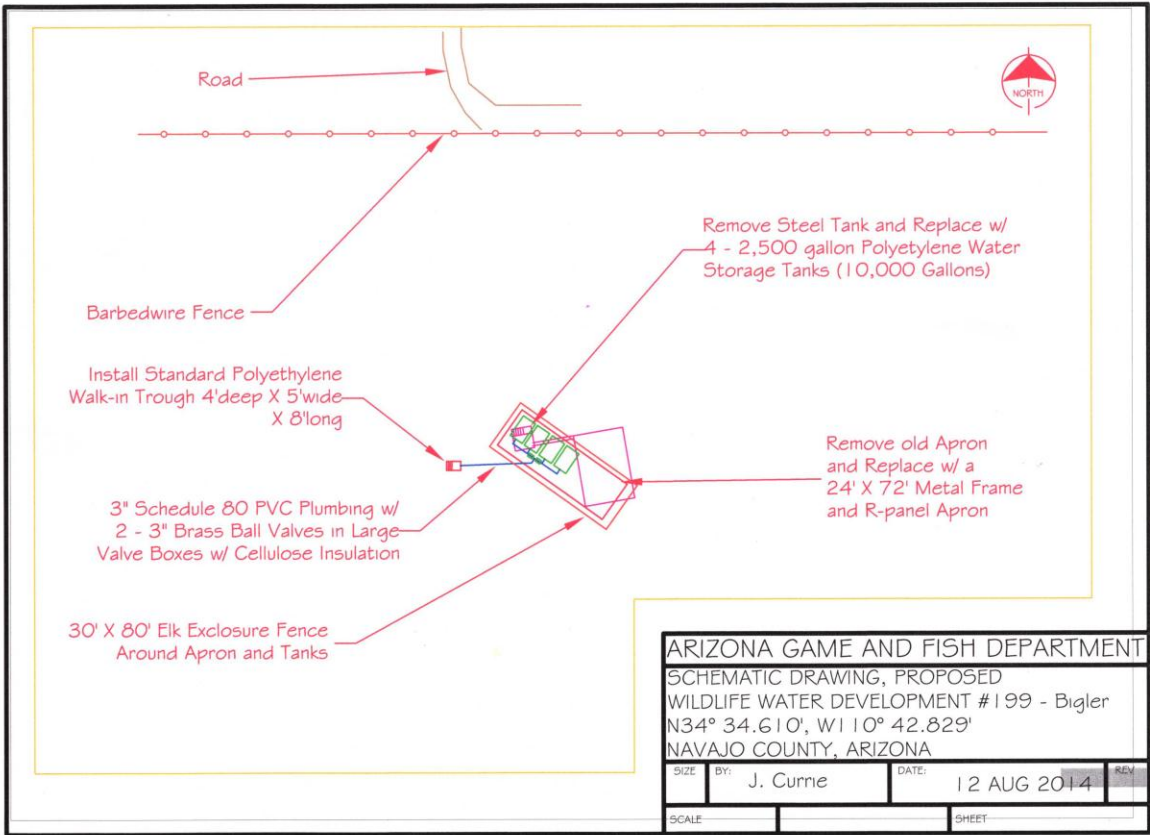
ler #199



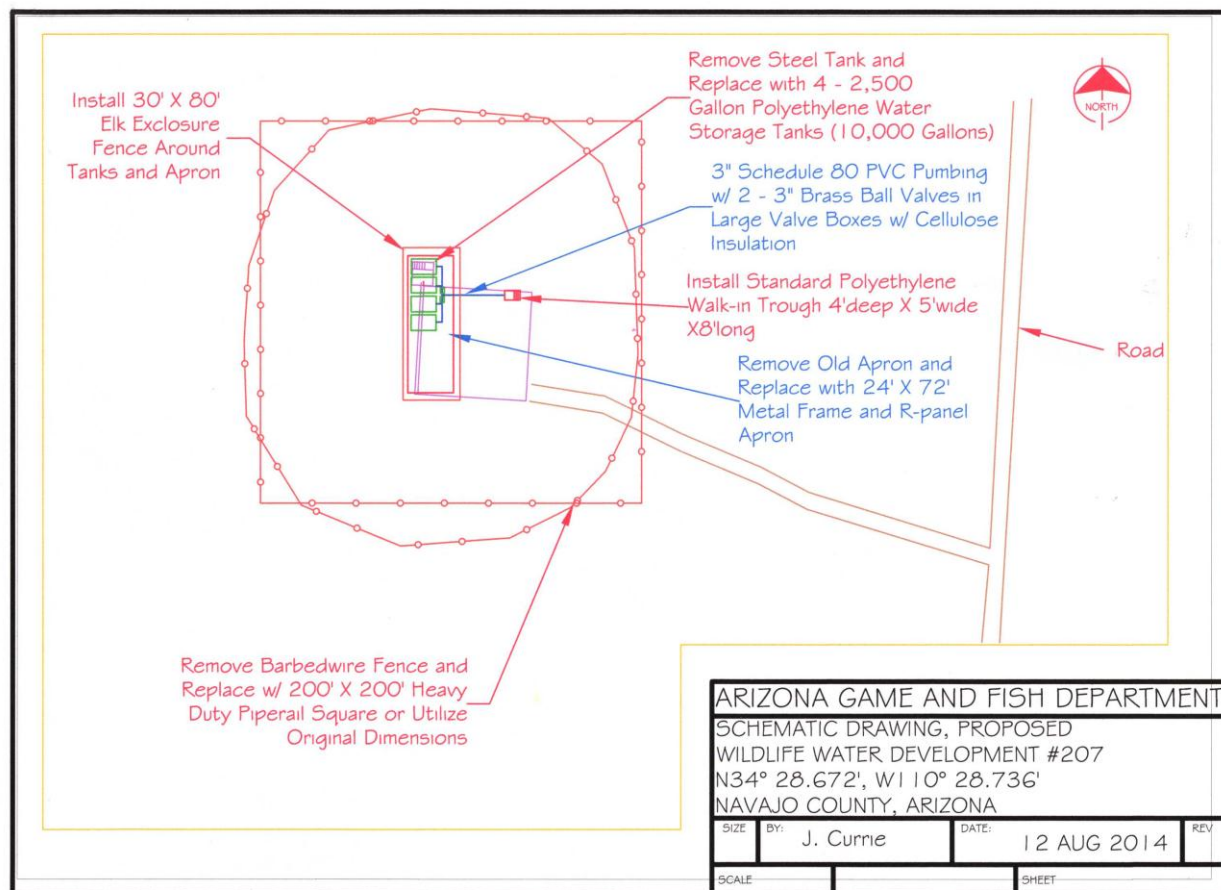
Rattlesnake #207



CADD Drawings
Bigler proposed



Rattlesnake proposed



GMU 4B water distribution map

